



# More Bang for Your Buck

*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

With additional funding, the Department of Natural Resources will expand our efforts to do more for the hunters and wildlife of Michigan by implementing the goals, objectives and strategies identified in the Wildlife Division's strategic plan - Guiding Principles and Strategies (GPS). The DNR's Wildlife Division is committed to delivering the best hunting and trapping opportunities that we can afford with the license revenue that hunters and trappers provide to us.

***With additional investment, we will create world-class recreational opportunities in Michigan by:***

## **Expanding big game hunting adventures.**

- Creating a big game program specific to the Upper Peninsula (UP)
- Using satellite collars on bears to collect scientific information and as a tool for outreach to schools and youth
- Increasing food and cover for deer and other big game on public and private lands by:
  - Increasing oak management to replace loss of beech and ash
  - Increasing early succession forest habitat
  - Increasing the number of openings and food plots
  - Controlling invasive plant species that offer poor food and cover for deer and other big game wildlife
- Conserving deer winter yards in northern Michigan on public and private lands
- Increasing private lands assistance to landowners with decreased deer numbers due to habitat degradation or disease, such as epizootic hemorrhagic disease (EHD)
- Expanding the Deer Habitat Improvement Partnership Initiative



## **Bringing back quality pheasant hunting to Michigan.**

- Doubling the pheasant population in southern Lower Peninsula (SLP)
- Expanding the Pheasant Restoration Initiative Program to 11 state game areas, mini-game areas and adjacent private landowners in Allegan, Clinton, Gratiot, Huron, Ionia, Jackson, Kalamazoo, Lenawee, Saginaw and Tuscola counties
  - Creating grassland complexes greater than 250 acres
  - Expanding the number of acres in the Hunting Access Program
  - Expanding the Conservation Reserve Enhancement Program to the St. Joseph River watershed

### **Making Michigan regionally known for our great diversity of high-quality waterfowl hunting.**

- Fully implementing the Michigan Waterfowl Legacy program
- Updating water control structures at managed waterfowl and wetland areas, so that more hunters can pursue more waterfowl
- Developing new managed waterfowl areas at high-quality wetlands near population centers
- Improving hunter access to waterfowl hunting areas, by:
  - Deepening access channels to address low Great Lakes water levels
  - Creating accessible hunting blinds at Dollarville Flooding
  - Creating bridge and birding platforms at Shiawassee River State Game Area
  - Improving hunter access at Hayward Lake wetland complex in the UP
- Improving Canada goose habitat management in the UP, specifically at Baraga Plains and Sturgeon River Sloughs

### **Creating outstanding grouse, woodcock and turkey hunting in Michigan.**

- Increasing wildlife management on public and private forest lands by:
  - Increasing oak management to replace loss of beech and ash
  - Increasing clear-cutting to benefit grouse and woodcock
  - Increasing the number of openings and food plots
  - Expanding grouse walking trails
  - Controlling invasive plant species that offer poor food and cover for wildlife
- Promoting early successional forest, fruit bearing shrubs and openings on commercial and non-commercial lands

### **Expanding the challenge of small game hunting for squirrel, rabbit and hare.**

- Increasing brush piles and food plots on public lands
- Increasing early successional habitat on public and private lands
- Increasing forest management to generate hard mast (nuts) as a food source

### **Expanding recreational shooting opportunities on public and private lands.**

- Increasing the number of target shooting opportunities on state game areas
- Partnering with conservation clubs to increase the number of privately owned shooting ranges open to the public

### **Preserving and promoting Michigan's hunting and trapping heritage.**

- Expanding hunting information through technology such as Mi-HUNT
- Expanding game bird hunting trails statewide
- Expanding the Hunting Access Program
  - Engaging in year-round promotion (including videos, blog posts and outreach via digital and social media) of Michigan's world-class hunting and fishing opportunities
    - Expanding cooperative youth events with partners
    - Increasing mentoring programs with conservation partners
    - Expanding events at our Wetland Wonders
      - Increasing recruitment and retention of hunters, using research and consumer trends to 1.) identify target segments in our current demographic and 2.) develop programs and partnerships that expand hunting opportunities and outreach
      - Increasing the number of conservation officers to expand customer contacts by COs, thereby boosting opportunities for public education about hunting and trapping and creating a safer environment for residents and visitors
      - Supply conservation officers to three Michigan counties that currently do not have assigned COs, and to other counties that currently do not have an adequate number of COs.



Visit [www.michigan.gov/dnr](http://www.michigan.gov/dnr) to learn about hunting and wildlife and to sign up to receive emails from the DNR!







## Wildlife Division

# Preserving Michigan's Hunting and Trapping Heritage

*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

### Why

Michigan citizens are blessed with an abundant array of natural resources and vast acreages of land that provide high quality hunting and trapping opportunities. These gifts were bestowed by previous generations of sportsmen and women who viewed themselves as conservationist first, and hunters and trappers second.

Everyone needs to continue this heritage of world class wildlife resources by supporting the development conservation-minded hunters and trappers, who are as interested in what legacy they are leaving future generations, as they are in the content of their game bag.

### What

Research has shown that a connection to outdoor recreation and especially success with hunting and trapping early in life is more likely to lead to a life-long commitment to wildlife conservation. Specifically by:



- Expanding opportunities for all hunters and trappers, especially beginners, to have a successful experience
- Increasing access to places to hunt near major population areas
- Greater efforts to train, inform, and educate those new to hunting and trapping on where, how, and when to pursue these activities
- Encouraging the development of a conservation and land ethic in all hunters and trappers
- Combining the power of modern communication technology with the ancient wisdom that can only be passed down by mentors

### How and Where

What each Michigan citizen values can only be taken into the future by those who follow their predecessor's trail. Specifically by:

- Expanding the Hunting Access Program (HAP) in southern Michigan from 15,000 acres to 25,000 acres of private lands open to public hunting. This program has been redesigned to better meet landowner needs and hunter demand and has gone from 7,000 acres to 15,000 over the last two years. Additional resources will allow the DNR to add another 10,000 acres of public hunting on private lands near southern Michigan urban centers
- Developing more game bird hunter access trails on State Forest Land in northern Michigan. These trails will make it easier for younger and older hunters to enjoy Michigan premier grouse and woodcock hunting



- Working with our partners throughout the State, the DNR will increase the number of new hunter and trapper mentoring opportunities, with special emphasis on those events that educate hunters and trappers on the important role they play as conservationist
- Expanding efforts to showcase the important role wetlands play in protecting our environment and providing wildlife habitat, on our waterfowl management areas by increasing the number of events held as part of our Wetland Wonders program
- Expanding the popular Mi-HUNT web application, that shows hunters where they can hunt on approximately 10 million acres of public and private land, to mobile devices so that hunters, trappers and other outdoor recreationist can use Mi-HUNT while afield

## **Beneficial Impacts**

Increasing the ease that hunters and trappers can access information on where and how to hunt and trap and providing mentoring support that will attract and retain more people to hunting and trapping. This increase in the numbers of hunters and trappers will bring more people to rural areas, which will support local businesses and restaurants. These funds will provide desperately needed financial support to a state that has been seriously impacted by the U.S. economic down-turn. For every new hunter it is estimated that they will spend on average 5.5 days afield providing \$35.30 per day for a total of \$194.15 to rural economies.







## Wildlife Division

# Expanding Big Game Hunting Adventures in Michigan


*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

### Why

White-tailed deer are an important part of Michigan's landscape and an unparalleled wildlife resource. Every Michigan citizen is affected by deer and deer management in some way. The DNR is committed to protecting and conserving our deer resource and the critical habitats upon which deer and other wildlife depend.

Deer hunting in Michigan accounts for approximately 9.6 million hunter days, with about 90% of all Michigan hunters (about 700,000 licensed hunters) on an annual basis participating in deer hunting. An estimated economic impact of more than \$500 million and direct support for over 5,300 Michigan jobs is annually produced through deer hunting in Michigan. A critical aspect of Michigan deer management is maintaining strong hunting traditions while adapting to modern conditions and influences related to deer, habitat, and hunters.

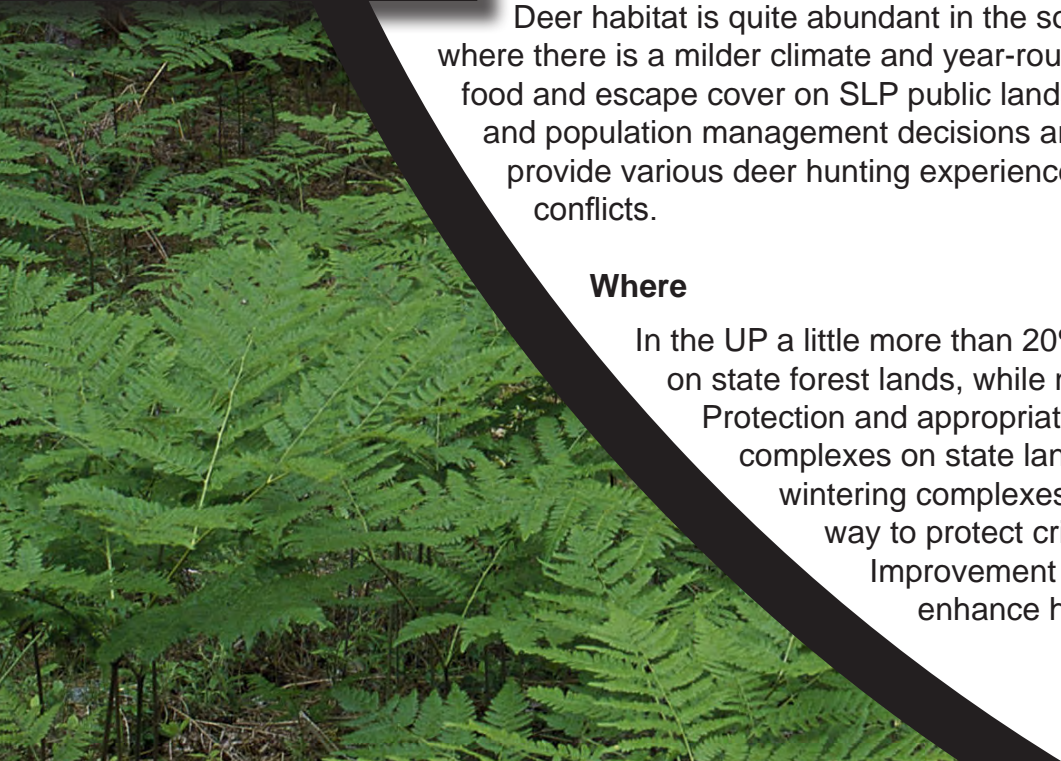
### What



In much of the Upper Peninsula (UP) and northern Lower Peninsula (NLP), overwinter survival is the most significant impact on the size of the deer population. Mortality in severe winters may impact 30% of the UP deer population and 15% of the NLP deer population. As many as 60 to 90% of deer in these regions migrate to wintering complexes (conifer stands), which provide cover that deer utilize for shelter from heavy snowfall and cold winter temperatures. Managing for winter food resources and nutritious spring forage adjacent to winter complexes is important. In the NLP, wintering concentrations are less pronounced, so deer are more dependent upon widely distributed hardwood browse, hard and soft mast, and herbaceous openings and open hardwood stands.

Deer habitat is quite abundant in the southern Lower Peninsula (SLP), where there is a milder climate and year-round nutrition support. Abundant fall food and escape cover on SLP public lands can increase deer use. Habitat and population management decisions are a challenge when trying to provide various deer hunting experiences while minimizing human-deer conflicts.

### Where



In the UP a little more than 20% of deer wintering complexes are on state forest lands, while nearly 60% occur on private land. Protection and appropriate management of the wintering complexes on state land are a DNR priority. Acquiring wintering complexes from private landowners is also a way to protect critical deer habitat. The Deer Habitat Improvement Partnership grant program helps enhance habitat on private land. In the SLP,

there is minimal public hunting land and it is important to provide fall foods and dense escape cover or bedding areas that attract deer to optimize hunting opportunities.

## How

U.P. habitat priorities include:

- Use forest management treatments to restore wintering habitats for deer, particularly in deer yards
- Provide winter forage by regenerating hardwoods and shrubs adjacent to deer yards
- Increase late-winter, early spring forage for deer near winter deer yards
- Evaluate new techniques to provide winter food and cover to attract deer to potentially suitable deer yards that are not currently being used
- Replace beech and ash lost from disease with oak and other mast producing species
- Where appropriate, conduct selective thinning of pine stands to promote hardwoods such as oak or convert to aspen

S.L.P. habitat priorities include:

- Work with partners to implement DNR plans to improve mast production, establish food plots, and expand young forests, brush, and warm-season grasses

Additional tools:

- Provide online resources for landowners to help them manage deer on their property
- Assist landowners in developing cooperatives with surrounding landowners
- Administer DNR grant program that identifies deer habitat projects on private land

## Beneficial Impacts

Additional benefits to wildlife include creation of habitat for:

- |          |            |                    |               |
|----------|------------|--------------------|---------------|
| • bear   | • elk      | • moose            | • wild turkey |
| • grouse | • woodcock | • forest songbirds |               |







## Wildlife Division

# Bringing Back Quality Cottontail Rabbit and Snowshoe Hare Hunting Opportunities to Michigan

*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

### Why

There was a time when hunting for species such as cottontail rabbits and snowshoe hares was the first hunting experience for many youth, which provided many fond memories of successful days afield. Forty years ago more than 500,000 hunters pursued rabbits and hares annually in Michigan. These hunters spent millions of days afield contributing significantly to Michigan's economy. Today, small game hunting in Michigan is but a fraction of what it was four decades ago; however, 75,000 people still actively hunt rabbits and hares throughout the state.

The decrease in hunters is related to the decline in rabbits and hares, which is directly related to the loss of habitat and available hunting areas. When habitat and hunting areas are abundant, these species provide increased opportunities for young and new hunters to get involved in the sport of hunting.

### What

Through intensive habitat management, the DNR hopes to increase the number of rabbit and snowshoe hare hunters by 25%. Cottontail rabbits do best in grasslands and brushy areas in close proximity to abundant foods such as row crops. Snowshoe hares require large expanses of young, dense forests -- particularly aspen and jack pine -- in association with shrubby wetlands (alder) and conifer swamps.



### Where

Efforts for improving cottontail rabbit habitat will focus on specific public land areas and surrounding private lands throughout southern Michigan. Specific sites include:

- Eaton, Clinton, Gratiot, Ionia, Isabella, Mecosta and Montcalm Counties:
  - Edmore State Game Area
  - Flat River State Game Area
  - Grand River State Game Area
  - Gratiot-Saginaw State Game Area
  - Haymarsh Lake State Game Area
  - Langston State Game Area
  - Maple River State Game Area
  - Portland State Game Area
  - Rose Lake State Wildlife Area
  - Stanton State Game Area
  - Tamarack Lake State Game Area
- Allegan, Barry, Cass, Kalamazoo, Muskegon, St. Joseph, and Van Buren Counties:
  - Allegan State Game Area
  - Augusta Creek State Game Area
  - Barry State Game Area
  - Crane Pond State Game Area
  - Gourdneck State Game Area
  - Keeler State Game Area
  - Muskegon State Game Area
  - Three Rivers State Game Area
- Huron, Saginaw and Tuscola Counties
  - Gagetown State Game Area
  - Quanicassee State Wildlife Area
  - Shiawassee State Game Area
  - Tuscola State Wildlife Area
  - Verona State Game Area

- Hillsdale, Jackson, Lenawee and Washtenaw Counties:

- Adams Township State Game Area
- Chelsea State Game Area
- Goose Lake State Game Area
- Lake Hudson State Recreation Area
- Lost Nation State Game Area
- Sharonville State Recreation Area
- Somerset State Game Area
- Waterloo State Recreation Area

Specific efforts for improving snowshoe hare habitat will focus on public land areas and surrounding private lands throughout the northern Lower Peninsula and the Upper Peninsula. Specific counties include:

- Northern Lower Peninsula: Alcona, Alpena, Cheboygan, Clare, Crawford, Emmet, Gladwin, Iosco, Kalkaska, Lake, Mason, Midland, Missaukee, Montmorency, Newaygo, Oceana, Ogemaw, Oscoda, Otsego, Presque Isle and Roscommon
- Upper Peninsula: Delta, Gogebic, Ontonagon and southern Mackinac and Schoolcraft

## How

Habitat management for rabbits and hares is often achieved through timber management and harvest activities and development of early successional forest and grasslands.

For cottontail rabbits:

- Increase the quantity and quality of grasslands adjacent to brushy areas or early successional forests on state owned lands
- Increase commercial and non-commercial timber harvest to increase early successional forest and construct brush piles adjacent to grasslands and row crops
- Provide technical assistance to private landowners for creating and expanding rabbit habitat on their lands
- Increased activities in overlapping initiatives that provide rabbit habitat such as the Michigan Pheasant Restoration Initiative (MPRI), and the Conservation Reserve Enhancement Program (CREP)

For snowshoe hares:

- Increase young aspen forests through timber harvest
- Continue jack pine plantings for Kirtland Warblers as this habitat provides excellent cover for snowshoe hares
- Increase timber sales and retain slash and create brush piles within timber sales associated with hare habitat.
- Increase beaver populations through harvest regulations to increase and maintain alder shrub communities.
- Increased activities in overlapping initiatives that provide hare habitat such as the Michigan Woodcock Initiative

Funding will be used to purchase seed and planting materials; contracts for planting, herbicide and land clearing services; brush pile construction; tree plantings; and leasing hunting rights from landowners and farmers.

## Beneficial Impacts

Additional benefits to wildlife include creation of habitat for:

- wild turkey
- woodcock
- mallard
- grassland songbirds
- grouse
- small mammals

Rabbit and hare hunting is a great way to introduce new hunters to the sport who will not only carry on our hunting heritage but support rural economies. Grasslands and filter strips planted on agricultural lands will reduce crop field runoff reducing sediment and nutrient influx to waterways, streams and rivers. In places where haying or grazing can be used as a habitat management tool, the management of these grasslands will provide an agricultural crop which will support Michigan's agricultural industry. On both public and private lands increased commercial timber harvest will directly provide dollars not only to the land manager but also to local and regional industry.





## Wildlife Division

# Creating Outstanding Grouse, Woodcock and Turkey Hunting in Michigan

*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

### Why

Ruffed grouse, American woodcock and eastern wild turkeys are found throughout the forested regions of the state and are very popular game birds. Many people mark the arrival of spring with the gobble of a turkey, the drumming of a grouse or the sky-dance of a woodcock. Hunters actively pursue upland game birds and many people travel from around the country to hunt these birds in Michigan. Nearly 60% (230,000 hunters) of all small game hunters pursue upland game birds and spend over 1.5 million days afield. Michigan is one of the top producers of woodcock and grouse in the nation, and ranks 6th in the nation for turkey harvest. Though grouse and woodcock can be found statewide, they are most prevalent in the northern Lower Peninsula and the Upper Peninsula, while wild turkeys can be found in almost every county in the state. Upland game birds have a strong contingent of stakeholders who support their management including the Ruffed Grouse Society and the National Wild Turkey Federation.



Eastern wild turkey populations have grown over the last 20 years but have plateaued in recent years. Ruffed grouse and woodcock populations nationally have experienced significant declines since the mid-1960s. Loss and degradation of early succession forest habitat is believed to be the primary factor responsible for these declines. Changes in land use and societal attitudes towards even-aged forest-management practices that create early succession habitat (such as clearcutting) will likely contribute to continued declines in grouse and woodcock populations.

### What

Ruffed grouse, woodcock and wild turkeys can be found in many different types of forest, deciduous forests, such as aspen, birch, maple or oak with an understory of fruit-bearing shrubs are preferred. Young aspen forests support many more grouse and woodcock than other types of forests. National grouse and woodcock plan objectives call for no net-loss of the aspen cover type by 2014 and an increase in aspen by 2022. Grouse and woodcock populations will be increased through efforts to maintain and expand early successional forest with emphasis on aspen, maintenance and creation of forest openings and planting fruit bearing shrubs.

Wild turkeys have a preference for oak with acorns providing a highly nutritious fall and winter food. In the northern range, deep snow limits the availability of winter food and is the primary limiting factor that restricts population expansion. A secondary limiting factor throughout turkey range is good brood cover. Openings with grasses and forbs and little or no overstory trees are preferred. Efforts will be increased to generate oak, openings and grassland meadows.

## Where

Habitat efforts will be increased statewide with emphasis on the northern two-thirds of the state and special emphasis on State Game Areas (SGA) in southern Michigan counties (Co.) with blocks of forest greater than 1,0000 acres. Some specific sites include:

- Allegan SGA (Allegan Co.)
- Barry SGA (Barry Co.)
- Crane Pond SGA (Cass Co.)
- Deford SGA (Tuscola Co.)
- Edmore SGA (Montcalm Co.)
- Flat River SGA (Ionia and Montcalm Co.)
- Gratiot-Saginaw SGA (Gratiot and Saginaw Co.)
- Langston SGA (Montcalm Co.)
- Lapeer SGA (Lapeer Co.)
- Lowell SGA (Kent and Ionia Co.)
- Maple River SGA (Gratiot, Ionia, and Clinton Co.)
- Middleville SGA (Barry Co.)
- Minden City SGA (Sanilac Co.)
- Muskegon SGA (Muskegon Co.)
- Rogue River SGA (Kent Co.)
- Sanilac SGA (Sanilac Co.)
- Stanton SGA (Montcalm Co.)
- Three Rivers SGA (St. Joseph Co.)
- Tuscola SGA (Tuscola Co.)
- Vassar SGA (Tuscola Co.)
- Vestaburg SGA (Montcalm Co.)

## How

Working on public lands and private lands, the DNR will work with partners to maintain and develop forest and grasslands that are key to grouse, woodcock and wild turkeys. Habitat practices will include:

- Increasing oak management to replace loss of beech and ash
- Increasing clear-cutting to benefit grouse and woodcock
- Increasing number of openings and food plots
- Expanding grouse walking trails
- Controlling invasive species that are poor food and cover for wildlife
- Promoting fruit bearing shrubs.



## Beneficial Impacts

Additional benefits to wildlife include creation of habitat for:

- snowshoe hare
- forest songbirds
- black bear
- deer
- wood duck

Management of forests for wildlife will help improve Michigan's timber industry by increasing harvest on public and private lands. Forest product companies will experience an increase in volume, allowing them to sustain their business, improve rural economies and keep jobs in Michigan.

Local communities reliant on forest-based economies will experience an improvement to commerce, tourism, recreation and quality of life. Increased hunting opportunities provide local communities with an expanded consumer base, spending on lodging, meals and supplies. Ruffed grouse hunters alone contribute over \$500 million to local economies each year nationwide. Improvement to these forest habitats will ensure Michigan retains its national status as a destination spot for top notch upland forest bird hunting.





Wildlife Division

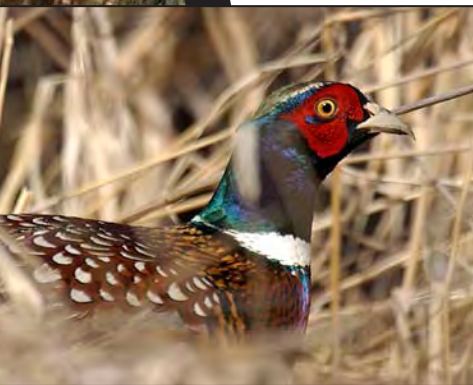
# Bringing Back Quality Pheasant Hunting to Michigan

*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

## Why

Pheasants were once plentiful across Michigan's southern Lower Peninsula. At one time schools closed on the pheasant season opener and long lunch lines were the norm at local diners as orange clad hunters converged following their morning hunt. Michigan small game hunters once shot over a million pheasants per year. For many Michiganders, their first experience bagging game came in their youth where they would chase pheasants out of idle fields and roadside ditches. Small game hunting such as bagging pheasants was the common door many went through on their way to becoming big game and lifelong hunters.

In recent years, however, Michigan pheasant hunters harvest less than 60,000 roosters annually. Many new hunters bypass small game hunting altogether as they go straight to bigger game such as deer, turkey, and bear. This loss of small game hunting heritage has resulted in dramatic declines in pheasant populations following large-scale land use changes throughout southern Michigan. This decline may also have a role in the overall decline in hunters in our state. Regardless of the causes, if something is not done soon part of Michigan's hunting heritage will be lost.



## What

Pheasant numbers can be increased locally by planting nesting cover, restoring wetlands, establishing winter cover, and planting certain grains to provide winter food. Thorough these techniques, 1-3 pheasant broods per 40 acres of managed habitat yielding a harvest of 4-8 roosters can usually be achieved. Working at the scale of 40 acres of habitat, however, will not result in meaningful population growth across a region. To get sustainable numbers of wild pheasants necessary to once again bolster small game hunting participation, we need large-scale habitat restoration at regional or landscape levels.

Programs specifically designed to have affects across a region or landscape, such as the Conservation Reserve Enhancement Program (CREP), have learned that when pheasant habitat is restored to occupying as little as 10-15% of a region, declines in pheasant populations can be reversed. The Michigan Pheasant Restoration Initiative (MPRI), developed in 2011, is a cooperative partnership approach to increasing pheasant populations across regions and landscapes. This initiative has the potential to change small game hunting opportunities, increase wildlife populations, improve hunter satisfaction, and help Michigan's economy. By restoring high-quality pheasant hunting opportunities, there should be not only a return of hunters who have left the sport, but a new generation of hunters as well.

## Where

Specific efforts will be conducted in 11 pheasant management cooperatives in southern Michigan focused around specific public land areas and surrounding private lands.

Specific sites include:

- Allegan State Game Area (Allegan County)
- Augusta Creek State Game Area (Kalamazoo County)
- Gageton State Game Area (Huron County)
- Lake Hudson State Park (Lenawee County)
- Maple River State Game Area (Gratiot, Ionia, and Clinton Counties)
- Quanicassee State Wildlife Area (Tuscola County)
- Rose Lake State Wildlife Research Area (Clinton County)
- Sharonville State Game Area (Jackson County)
- Shiawassee State Game Area (Saginaw County)
- Tuscola County mini-game areas
- Verona State Game Area (Huron County)



## How

Working on public lands and the surrounding private lands, the DNR will develop at least 11 large grassland complexes of 250 acres or more of high quality pheasant habitat. Habitat practices will include:

- restoration of poor quality grasslands
- planting quality nesting cover of native grasses and wildflowers
- wetland restorations along with management to provide native cattail cover for winter habitat
- planting switchgrass for winter cover
- planting food plots of corn, soybeans, sunflowers, and millet for winter food

For participating cooperatives, DNR staff will provide advice and assistance on habitat prescriptions; project partners will aid in securing seed for grass plantings; and federal resources may be leveraged to provide financial incentives for private landowners. For private lands that meet habitat restoration objectives, the DNR will provide seed and materials, the use of equipment, and in some cases, the release of wild pheasants to initiate population response. National Farm Bill programs such as the Conservation Reserve Program (CRP) and CREP will be leveraged to provide additional opportunities to promote pheasant habitat on agricultural lands. DNR will work with partners to expand present CREP opportunities in Saginaw Bay and the River Raisin Watershed as well as expand opportunities into new areas such as the St. Joseph river basin in southern Michigan.

## Beneficial Impacts

Additional benefits to wildlife include creation of habitat for:

- |                       |                      |               |
|-----------------------|----------------------|---------------|
| • bobwhite quail      | • cottontail rabbits | • deer        |
| • grassland songbirds | • mallards           | • wild turkey |

Grasslands, along with CRP and CREP practices such as filter strips planted on agricultural lands, will reduce crop field run-off reducing sediment and nutrient loads in our ponds, lakes, streams and rivers.

In places where haying or grazing can be used as a habitat management tool, these grasslands will provide an agricultural crop with economic benefits to landowners while benefiting pheasants.

By increasing recreational hunting opportunities, more hunters will travel to Michigan's rural agricultural areas where they will spend money on food, gas, and supplies that will benefit local businesses. These funds will provide desperately needed financial support to a state that has been seriously impacted by the U.S. economic downturn. In addition, funds provided through MPRI for habitat restoration and management will be used to purchase seed and planting materials while also being used to contract local farmers for land clearing and planting services. With the additional funds necessary to realize MPRI's potential, there will be a \$2 in local economic activity for every \$1 MPRI investment in local projects annually.





## Wildlife Division

# Making Michigan Regionally Known for its Great Diversity of High Quality Waterfowl Hunting

*Expanding our ability to implement our Guiding Principles and Strategies (GPS)*

### Why

Michigan citizens have a strong connection to their state's rich and diverse waterfowl and wetlands. Some go duck hunting every year. Others sit on their back porches and watch the annual fall waterfowl migrations. And, many citizens get clear drinking water from groundwater purified by Michigan's wetlands.

Renowned waterfowl areas like Saginaw Bay, St. Clair Flats, and the Detroit River have built and supported local economies and communities with industries such as duck decoys, boats, and hunting clubs. Michigan has a strong waterfowl hunting heritage with unique opportunities to pursue dabbling, diving and sea ducks, and Canada geese because Michigan is an important migratory waterfowl flyway that provides breeding, spring and fall migration, and wintering habitat.

Michigan regularly ranks in the top three for Canada goose harvest and hunters in the nation, and top 10 for average annual sales of Federal Duck Stamps. However, there continues to be significant threats to waterfowl habitats, which includes invasive species, climate change and declining Great Lakes water levels, and demand for food and fuel, which results in the conversion of conservation lands to agricultural. More than 50% of Michigan's historic wetland base has been lost; and, in fact, the rate of wetland loss in key waterfowl landscapes exceeds 90%. More must be done to conserve Michigan's great waterfowl heritage.

### What

To protect Michigan's waterfowl and wetland resources, a new initiative – the Michigan Waterfowl Legacy (MWL) -- has been developed by a variety of partners. The Legacy's goals are to restore, conserve, and celebrate Michigan's waterfowl, wetlands, and waterfowl hunting community. Specifically by:

- Fully implementing the MWL so that Michigan is unmatched in wetland and waterfowl-related experiences
- Providing first-class waterfowl hunting, bird-watching, and other wetland-related outdoor recreation through the Explore Michigan's Wetland Wonders program
- Creating and managing high quality wetland habitat to sustain waterfowl populations
- Developing new managed waterfowl hunt areas at high quality wetland areas that are near population centers

### Where

Special attention will be paid to manage waterfowl and wetland areas throughout Michigan. Specific sites include:

- |                         |                    |
|-------------------------|--------------------|
| - Allegan               | - Munuscong Bay    |
| - Au Train Basin        | - Muskegon         |
| - Crow Island           | - Nayanquing Point |
| - Dollarville           | - Portage Marsh    |
| - Fish Point            | - Pte. Mouillee    |
| - Gratiot-Saginaw       | - Shiawassee River |
| - Hayward Lake          | - St. Clair Flats  |
| - Houghton Lake Flats   | - Sturgeon River   |
| -Manistee Marsh Sloughs | - Wigwam Bay       |
| - Maple River           |                    |



Additionally, a special effort will be made to increase Canada goose habitat management in the Upper Peninsula.

## How

Improvements will include:

- Updating infrastructure so that management is as efficient and effective as possible. This would include repairs and replacement of water control structures and pumps for water management, which would improve reliability and lower operating costs saving sportsperson's dollars, while enhancing habitat for better quality waterfowl hunting.
- Controlling invasive species, especially phragmites.
- Intensively managing wetlands and controlling hunter numbers through a managed hunt, which would increase access and provide first-class bird-watching and other wetland-related outdoor recreation and significantly boost local ecotourism.
- Dredging and deepening access channels
- Lowering pump intakes as needed to address low Great Lakes water levels and continue to provide hunters access to historic waterfowl areas
- Installing an accessible hunting blind at the Dollarville Flooding
- Constructing a bridge and birding platform at Shiawassee River SGA to greatly improve access to the northern part of the area
- Providing better hunter access at Hayward Lake wetland complex
- Organizing Wetland Wonders events that will educate the public about wetlands and waterfowl, increase the number of hunters pursuing waterfowl, and increase the number of people participating in wetland-related outdoor recreation.

## Beneficial Impacts

Additional benefits to wildlife include creation of habitat for:

- Mallard (featured species)
- Wood duck (featured species)
- Canada geese (featured species)
- Wetland mammals such as beaver, muskrat, mink, otter
- Scaup (featured species)
- All waterfowl, wetland birds, and shorebirds
- Amphibians and reptiles

Healthy wetlands provide a lengthy list of benefits to people including filtering of sediments, nutrients, and toxins from waterways, streams and rivers; flood protection; groundwater recharge; habitat for a huge diversity of wildlife; and places for outdoor exploration and recreation.

Waterfowl and wetlands figure prominently into the improvement of Michigan's economy. Nationally, sales of Duck Stamps have generated more than \$750 million, which has been used to help purchase or lease over 5.3 million acres of waterfowl habitat. Trip and equipment related hunting expenses generated over \$2.3 billion in total economic output in 2006 in the US. Michigan's waterfowl hunters spend about \$21.7 million per year during their hunting trips.

Improved habitat on our managed waterfowl and wetland areas will increase hunting opportunities and directly benefit the local communities. Increased hunter trips will support local businesses and restaurants. Funds will be used to repair and enhance infrastructure; upgrade and maintain equipment used for farming and other habitat management; purchase seed and herbicide; contract planting and herbicide application; and promote the areas to increase visitation. All this will directly provide thousands of employment hours.